



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/813,991

03/31/2004

Christophe Del Toso

852263.412

6081

38106

7590

04/14/2008

SEED INTELLECTUAL PROPERTY LAW GROUP PLLC
701 FIFTH AVENUE, SUITE 5400
SEATTLE, WA 98104-7092

EXAMINER

TRAN, KHAI

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

04/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/813,991	Applicant(s) DEL TOSO ET AL.	
	Examiner KHAI TRAN	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 15-24 and 28-30 is/are rejected.
- 7) ☒ Claim(s) 6, 11-14 and 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 8/15/2007 has been entered. Claims 1-28 are pending in this Office action.

Response to Arguments

2. Applicant's arguments filed 1/30/2008 have been fully considered but they are not persuasive.

Applicant states that Arai ('672) does not disclose the limitations of "detecting such criterion includes obtaining an estimation of a length of a line" and "in response to said detection, disabling a number of carriers in order to establish the asymmetric operating mode".

In response to the Applicant's argument that Arai ('672) disclose the limitations of "detecting such criterion includes obtaining an estimation of a length of a line" and "in response to said detection, disabling a number of carriers in order to establish the asymmetric operating mode" (col. 3, lines 50-55; and col. 6, line 58 to col. 7, line 6 showing that it possible to autonomously measure, by a function equipped in an xDSL modem, a transmission loss concerning an analog signal on a subscriber line connected to the xDSL modem. Thus, since the line length of the subscriber line can be estimated, it is no longer necessary to send workers from the provider to measure line length, and a risk that the provider had in setting up services can be drastically reduced).

Claim Rejections - 35 USC § 102

Art Unit: 2611

3. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 7-10, 15, 16-20, 21-24, 28, 29, 30 are rejected under 35

U.S.C. 102(e) as being anticipated by Arai (U.S. Pat. 7,224,672).

Regarding claim 1, Arai discloses a process for configuring a symmetric xDSL-type modem, comprising: detecting a criterion corresponding to an asymmetric operating mode of an ADSL-type; wherein detecting such criterion includes obtaining an estimation of a length of a line; and in response to the detection, disabling a number of carriers in order to establish the asymmetric operating mode (col. 3, lines 50-55, and col. 6, line 58 to col. 7, line 6).

Regarding claim 2, Arai discloses a VDSL-type modem, and ADSL mode. Therefore, the operation of the VDSL modem and ADSL modem is inherent to operate at 4096 carriers (VDSL modem) and at 356 carriers (ADSL modem).

Regarding claim 3, Arai discloses wherein the detection of the criterion further includes a detection of signals defined in recommendation G.994.1 or a

Art Unit: 2611

measurement of the signal to noise ratio per carrier (col. 5, lines 14-21).

Regarding claim 4, Arai discloses wherein the criterion is the estimation of the line length derived from a timing advance measurement (col. 2, lines 11-17).

Regarding claim 5, Arai further discloses deactivating a cyclic suffix in a transmit path and digital power spectral density shaping filtering for conformity to an ADSL-type mask, associated with a digital echo suppression filter and a temporal equalizer in a receive path (col. 14, lines 28-42).

Claims 7-10 are similar to claims 1-4. Therefore, claims 7-10 are rejected under a similar rationale.

Regarding claim 15, Arai also discloses wherein switch from ADSL mode to VDSL mode is accomplished in response to user control (col. 3, lines 36-40).

Claims 16-20 are similar to claims 1-2, 4-5. Therefore, claims 16-20 are rejected under a similar rationale.

Claims 21-24 are similar to claims 1-4. Therefore, claims 21-24 are rejected under a similar rationale.

Art Unit: 2611

Claim 28 is similar to claim 15. Therefore, claim 28 is rejected under a similar rationale.

Regarding claims 29, 30, Arai discloses wherein the detection or means for controlling enables top-down interoperability between the asymmetric operating mode and the symmetric operation (col. 8, lines 44-65).

Allowable Subject Matter

5. Claims 6, 11-14, 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: Arai fails to disclose a transmit path comprising: activating a digital power spectral density shaping filter (PSF) for conformity with an ADSL-type mask; deactivating a process for inserting a cyclic suffix after each symbol to be transmitted; activating a $H^{-1}(f)$ pre-compensation before an inverse Fourier transform allowing to compensate for a phase and amplitude distortion introduced by the digital PSF; and in a receive path, activating a digital echo suppression filter and temporal equalizer.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Vitenberg (U.S. Pat. 6,763,097) discloses a source adaptive digital subscriber line and method.

Art Unit: 2611

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

/KHAI TRAN/

Primary Examiner, Art Unit 2611